

**ABSTRACT OF THE DISCLOSURE**

- [38] A braided rotor blade spar includes a tri-axle braid in which braided bias angled fibers are located non-parallel to a longitudinal axis of the spar. Zero degree fibers are located parallel to the axis and are positioned to be on the upper and lower surfaces of the spar. The bias angle fibers are braided around the zero degree fibers. In a method of manufacture of the braided spar, a braided sleeve is formed dry over a mandrel by a multi-axial braiding machine. Once the braided sleeve is formed upon the mandrel, the mandrel is located within a matched metal mold, resin impregnated, and cured. The mandrel is then removed from the finished braided spar.

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